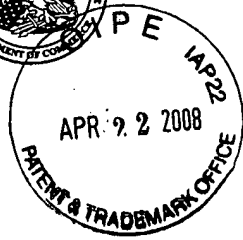




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NOTICE OF ALLOWANCE AND FEE(S) DUE

36275

7590

04/17/2008

O'KEEFE, EGAN, PETERMAN & ENDERS LLP
1101 CAPITAL OF TEXAS HIGHWAY SOUTH
#C200
AUSTIN, TX 78746

EXAMINER

ELAMIN, ABDELMONIEM I

ART UNIT

PAPER NUMBER

2116

DATE MAILED: 04/17/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/771,010

01/26/2001

Nir Tal

SILA:310

6353

TITLE OF INVENTION: COMMUNICATION SYSTEM WHICH DYNAMICALLY SWITCHES SIZES OF SAMPLE BUFFER BETWEEN FIRST SIZE FOR QUICK RESPONSE TIME AND SECOND SIZE FOR ROBUSTNESS TO INTERRUPT LATENCY

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$0	\$0	\$1440	07/17/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

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04/17/2008

O'KEEFE, EGAN, PETERMAN & ENDERS LLP
1101 CAPITAL OF TEXAS HIGHWAY SOUTH
#C200
AUSTIN, TX 78746

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(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,010	01/26/2001	Nir Tal	SILA:310	6353

TITLE OF INVENTION: COMMUNICATION SYSTEM WHICH DYNAMICALLY SWITCHES SIZES OF SAMPLE BUFFER BETWEEN FIRST SIZE FOR QUICK RESPONSE TIME AND SECOND SIZE FOR ROBUSTNESS TO INTERRUPT LATENCY

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$0	\$0	\$1440	07/17/2008

EXAMINER	ART UNIT	CLASS-SUBCLASS
ELAMIN, ABDELMONIEM I	2116	710-056000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY AND STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

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Date _____

Typed or printed name _____

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This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,010	01/26/2001	Nir Tal	SILA:310	6353
36275	7590	04/17/2008	EXAMINER	
O'KEEFE, EGAN, PETERMAN & ENDERS LLP 1101 CAPITAL OF TEXAS HIGHWAY SOUTH #C200 AUSTIN, TX 78746			ELAMIN, ABDELMONIEM I	
			ART UNIT	PAPER NUMBER
			2116	
			DATE MAILED: 04/17/2008	

Determination of Patent Term Extension or Adjustment under 35 U.S.C. 154 (b)

A reissue patent is for "the unexpired part of the term of the original patent." See 35 U.S.C. 251. Accordingly, the above-identified reissue application is not eligible for Patent Term Extension or Adjustment under 35 U.S.C. 154(b).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.

09/771,010

Examiner

Abdelmoniem Elamin

Applicant(s)

TAL ET AL.

Art Unit

2116

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to after-final amendment filed on 11/2/2007 and the attached Examiner's Amendment.
2. ☒ The allowed claim(s) is/are 13-60.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Richard D. Egan (*Reg. #36,788*) on April 1, 2008.

2. The application has been amended as follows:

3. **In the Claims:**

Please amend Claims 13-60 as presented in the attached fax (pages 2-10).

Allowable Subject Matter

4. Claims 13-60 are allowed.

REASONS FOR ALLOWANCE

5. The following is an examiner's statement of reasons for allowance:

the prior art of record does not teach or fairly suggest the following:

sample buffers having a first buffer size capable of quick response times, sample buffers having a second buffer size capable of accommodating system latency, and a switching device capable of dynamically switching between the use of the sample buffers having the first buffer size and the sample buffers having the second buffer size.

For these reasons, claims 13, 15, 27-29, 39-41, 51-53, 57 are deemed to be allowable

Art Unit: 2116

over the prior art of record and claims 14, 16-26, 30-38, 42-50, 54-56, 58-60 are allowed by dependency.

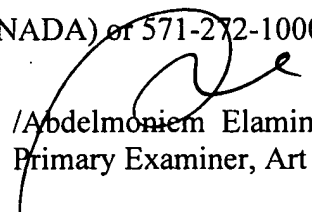
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdelmoniem Elamin whose telephone number is 571-2727-3674. The examiner can normally be reached on MON - THUR 10:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Prveen can be reached on 571-272-3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


/Abdelmoniem Elamin/
Primary Examiner, Art Unit 2116

April 1, 2008

Claims 1-12 (Cancelled)

Claim 13 (New): A method of achieving a balance between response time and system latency in a communication system, said communication system including a receiver and a transmitter, wherein sample processing is divided into time slices within said communication system, said method comprising the steps of:

employing a receive sample buffer and a transmit sample buffer, each having a first buffer size L1 capable of quick response times;

employing a receive sample buffer and a transmit sample buffer, each having a second buffer size L2 capable of accommodating system latency;

employing a switching device enabling said communication system to dynamically switch between said transmit sample buffers and between said receive sample buffers;

making a determination to switch between said first buffer size L1 and said second buffer size L2 before the activation of said transmitter during a time slice N;

processing said receive sample buffer having said first buffer size L1 and said transmit sample buffer having said first buffer size L1 during a time slice N-1;

processing said receive sample buffer having said first buffer size L1 and said transmit sample buffer having said second buffer size L2 during said time slice N;

processing said receive sample buffer having said first buffer size L1 and said transmit sample buffer having said second buffer size L2 during a time slice N+1; and

processing said receive sample buffer having said second buffer size L2 and said transmit sample buffer having said second buffer size L2 during a time slice N+2 and during time slices thereafter until deciding to switch between said first buffer size L1 and said second buffer size L2.

Claim 14 (New): The method of claim 13, wherein the size of said transmit and receive

sample buffers is coherently switched without any loss of data.

Claim 15 (New): A system for achieving a balance between response time and system latency in a communication system, said system comprising:

sample buffers having a first buffer size capable of quick response times;

sample buffers having a second buffer size capable of accommodating system latency;

and

a switching device capable of dynamically switching between the use of said sample buffers having said first buffer size and said sample buffers having said second buffer size.

Claim 16 (New): The system of claim 15, wherein said second buffer size is robust so as to accommodate system latency.

Claim 17 (New): The system of claim 15, wherein said sample buffers are maintained in a memory.

Claim 18 (New): The system of claim 15, wherein said sample buffers are maintained in physical buffers.

Claim 19 (New): The system of claim 15, wherein said dynamic switching is performed in response to communication system operating requirements.

Claim 20 (New): The system of claim 15, wherein said system latency comprises interrupt latency.

Claim 21 (New): The system of claim 15, wherein said system latency comprises bus latency.

Claim 22 (New): The system of claim 15, wherein said system latency comprises both interrupt latency and bus latency.

Claim 23 (New): The system of claim 15, wherein the size of said sample buffers is coherently switched without any loss of data.

Claim 24 (New): The system of claim 15, wherein said second buffer size is greater than said first buffer size.

Claim 25 (New): The system of claim 15, wherein the size of said sample buffers is switched to said first buffer size when a modem connection is reinitialized or restarted.

Claim 26 (New): The system of claim 15, wherein the size of said sample buffers is switched to said first buffer size when a retrain sequence has been initialized, wherein said communication system implements an International Telecommunication Union standard chosen from the group of V.32, V.32bis and V.34.

Claim 27 (New): A system for achieving a balance between response time and system latency in a communication system, said system comprising:

sample buffers having a first buffer size capable of quick response times;

sample buffers having a second buffer size that is robust so as to accommodate system latency; and

a switching device capable of dynamically switching between the use of said sample buffers having said first buffer size and said sample buffers having said second buffer size.

Claim 28 (New): A system for achieving a balance between response time and system latency in a communication system, said system comprising:

a sample buffer that is variable in size, wherein the sample buffer has a first buffer size capable of quick response times and a second buffer size capable of accommodating system latency; and

a switching device capable of dynamically switching between said first buffer size and said second buffer size of the sample buffer.

Claim 29 (New): A machine readable storage medium containing executable instructions which, when executed by a machine, causes the machine to perform the steps of a method for achieving a balance between response time and system latency in a communication system, the method comprising:

employing sample buffers having a first buffer size capable of quick response times;

employing sample buffers having a second buffer size capable of accommodating system latency; and

dynamically switching between the use of said sample buffers having said first buffer size and said sample buffers having said second buffer size.

Claim 30 (New): The medium of claim 29, wherein said second buffer size is robust so as to accommodate system latency.

Claim 31 (New): The medium of claim 29, wherein said dynamic switching is performed in response to communication system operating requirements.

Claim 32 (New): The medium of claim 29, wherein said system latency comprises interrupt latency.

Claim 33 (New): The medium of claim 29, wherein said system latency comprises bus latency.

Claim 34 (New): The medium of claim 29, wherein said system latency comprises both interrupt latency and bus latency.

Claim 35 (New): The medium of claim 29, wherein the size of said sample buffers is coherently switched without any loss of data.

Claim 36 (New): The medium of claim 29, wherein said second buffer size is greater than said first buffer size.

Claim 37 (New): The medium of claim 29, wherein the size of said sample buffers is switched to said first buffer size when a modem connection is reinitialized or restarted.

Claim 38 (New): The medium of claim 22, wherein the size of said sample buffers is switched to said first buffer size when a retrain sequence has been initialized, wherein said communication system implements an International Telecommunication Union standard chosen from the group of V.32, V.32bis and V.34.

Claim 39 (New): A machine readable storage medium containing executable instructions which, when executed by a machine, causes the machine to perform the steps of a method for achieving a balance between response time and system latency in a communication system, the method comprising:

employing sample buffers having a first buffer size capable of quick response times;

employing sample buffers having a second buffer size that is robust so as to accommodate system latency in said communication system; and

employing a switching device capable of dynamically switching between the use of said sample buffers having said first buffer size and said sample buffers having said second buffer size.

Claim 40 (New): A machine readable storage medium containing executable instructions which, when executed by a machine, causes the machine to perform the steps of a method for achieving a balance between response time and system latency in a communication system, the method comprising:

employing a sample buffer that is variable in size, wherein said sample buffer has a first buffer size capable of quick response times and a second buffer size capable of accommodating system latency; and

employing a switching device capable of dynamically switching between said first buffer size and said second buffer size of said sample buffer.

Claim 41(New): A method of achieving a balance between response time and system latency in a communication system, said method comprising:

employing sample buffers having a first buffer size capable of quick response times;

employing sample buffers having a second buffer size capable of accommodating system latency; and

employing a switching device capable of dynamically switching between said sample buffers having said first buffer size and said sample buffers having said second buffer size.

Claim 42 (New): The method of claim 41, wherein said second buffer size is robust so as to accommodate system latency.

Claim 43 (New): The method of claim 41, wherein said dynamic switching is performed in response to communication system operating requirements.

Claim 44 (New): The method of claim 41, wherein said system latency comprises interrupt latency.

Claim 45 (New): The method of claim 41, wherein said system latency comprises bus latency.

Claim 46 (New): The method of claim 41, wherein said system latency comprises both interrupt latency and bus latency.

Claim 47 (New): The method of claim 41, wherein the size of said sample buffers is coherently switched without any loss of data.

Claim 48 (New): The method of claim 41, wherein said second buffer size is greater than said first buffer size.

Claim 49 (New): The method of claim 41, wherein the size of said sample buffers is

switched to said first buffer size when a modem connection is reinitialized or restarted.

Claim 50 (New): The method of claim 41, wherein the size of said sample buffers is switched to said first buffer size when a retrain sequence has been initialized, wherein said communication system implements an International Telecommunication Union standard chosen from the group of V.32, V.32bis and V.34.

Claim 51(New): A method of achieving a balance between response time and system latency in a communication system, said method comprising:

employing sample buffers having a first buffer size capable of quick response times;
employing sample buffers having a second buffer that is robust so as to accommodate system latency in said communication system; and

employing a switching device capable of dynamically switching between said sample buffers having said first buffer size and said sample buffers having said second buffer size.

Claim 52 (New): A method of achieving a balance between response time and system latency in a communication system, said method comprising:

employing a sample buffer that is variable in size, wherein said sample buffer has a first buffer size capable of quick response times and a second buffer size capable of accommodating system latency; and

employing a switching device capable of dynamically switching between said first buffer size and said second buffer size of said sample buffer.

Claim 53 (New): A modem capable of performing a start-up procedure with a remote device before entering a data phase for exchanging data with said remote device, said start-up procedure having a first start-up sequence and a second start-up sequence, said modem comprising:

a sample buffer having a first buffer size for use during said first start-up sequence;
a sample buffer having a second buffer size for use during said first start-up sequence,
wherein said second buffer size is greater than said first buffer size; and

a switching device capable of switching from said sample buffer having said first buffer size to said sample buffers having said second buffer size based on a transition in said start-up procedure from said first start-up sequence to said second start-up sequence.

Claim 54 (New): The modem of claim 53, wherein said modem achieves a balance between response time and system latency in a communication system by switching from said sample buffer having said first buffer size to said sample buffers having said second buffer size.

Claim 55 (New): The modem of claim 53, wherein said first start-up sequence is an initial start-up sequence of said start-up procedure.

Claim 56 (New): The modem of claim 55, wherein said start-up procedure is performed according to the International Telecommunication Union V.32bis standard, and said initial start-up sequence includes the ranging phase of said V.32bis standard.

Claim 57 (New): A method for use by a modem to perform a start-up procedure with a remote device before entering a data phase for exchanging data with said remote device, said start-up procedure having a first start up sequence and a second start-up sequence, said method comprising:

employing a sample buffer having a first buffer size for use during said first start-up sequence;

employing a sample buffer having a second buffer size for use during said first start-up sequence, wherein said second buffer size is greater than said first buffer size; and

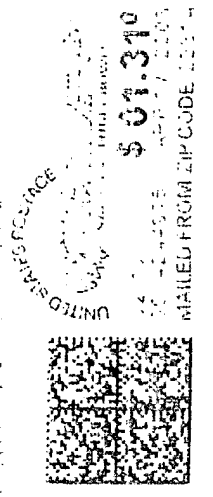
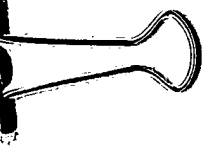
switching from said sample buffer having said first buffer size to said sample buffers having said second buffer size based on a transition in said start-up procedure from said first start-up sequence to said second start-up sequence.

Claim 58 (New): The method of claim 57, wherein said switching achieves a balance between response time and system latency in a communication system.

Claim 59 (New): The method of claim 57, wherein said first start-up sequence is an initial start-up sequence of said start-up procedure.

Claim 60 (New): The method of claim 59, wherein said start-up procedure is performed according to the International Telecommunication Union V.32bis standard, and said initial start-up sequence includes the ranging phase of said V.32bis standard.

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